

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A modular ankle implant comprising:
a tibial component having a tibial dome and a single tibial flange;
a talar component; and
a bearing matingly articulating with the talar component, the bearing having a bearing dome mating with the tibial dome for relative rotation therebetween, and a single bearing flange engaging the tibial flange to limit rotation of the bearing relative to the tibial component.
2. (Original) The ankle implant of claim 1, wherein the bearing and the talar component articulate over a doubly-curved surface for relative movement therebetween.
3. (Original) The ankle implant of claim 2, wherein the doubly-curved surface has curvatures in two mutually perpendicular planes.
4. (Original) The ankle implant of claim 1, wherein the tibial and bearing domes are selected from the group consisting of sphere, cylinder, cone and portions thereof.

5. (Currently Amended) The ankle implant of claim 1, wherein the tibial component includes a rib structure over a convex surface of the tibial dome for securing the tibial component to bone.

6. (Original) The ankle implant of claim 1, wherein the bearing dome has a convex surface articulating with a concave surface of the tibial dome.

7. (Currently Amended) A modular ankle implant for implantation between a tibia and a talus, the implant comprising:

a tibial component having an annular plate, a tibial dome and a only one tibial flange, wherein the dome has convex and concave surfaces that are bounded by the annular plate, and wherein the tibial flange extends from only one side of the annular plate at an angle relative to the annular plate;

a talar component having a doubly-curved surface; and

a bearing having a bottom surface, a bearing dome and a only one bearing flange, wherein the bottom surface matingly articulates with the doubly-curved surface of the talar component for hinged movement therebetween, the bearing dome has a convex surface mating with the concave surface of the tibial dome for relative rotation therebetween, and the bearing flange interacts with the tibial flange to limit rotation of the bearing relative to the tibial component.

8. (Original) The ankle implant of claim 7, wherein the tibial and bearing domes are selected from the group consisting of sphere, cylinder, cone and portions thereof.

9. (Original) The ankle implant of claim 7, wherein the tibial component includes a rib structure over the convex surface of the tibial dome for implantation into a tibia.

10. (Original) The ankle implant of claim 7, wherein the tibial component includes posts extending from the plate for implantation into the tibia.

11. (Original) The ankle implant of claim 7, wherein the talar component has a ridged structure for implantation into the talus.

12. (Original) The ankle implant of claim 7, wherein the doubly-curved surface has curvatures in two mutually perpendicular planes.

13. (Cancelled)

14. (Currently Amended) The ankle implant of claim ~~13~~ 22, wherein hinged articulation includes flexion in a sagittal plane and rotation in a coronal plane.

15. (Currently Amended) The ankle implant of claim ~~13~~ 22, wherein limited rotation relative to the tibial component includes rotation in a transverse plane.

16. (Original) The ankle implant of claim 15, wherein limited rotation includes a range of about 5° to 10°.

17. (Currently Amended) The ankle implant of claim 43 22, wherein rotation between the bearing and the tibial component is limited by engagement of a single bearing flange and a single tibial flange, the bearing and tibial flanges being parallel flanges and extending respectively from the bearing and the tibial component.

18. (Cancelled)

19. (Currently Amended) The ankle implant of claim 43 22, wherein hinged articulation includes articulation between conforming doubly-curved surfaces of the bearing and the talar component.

20-21. (Cancelled)

22. (Currently Amended) A modular ankle implant comprising:
a tibial component coupled to a talar component with a bearing, wherein the bearing is adapted for hinged articulation relative to the talar component and limited rotation relative to the tibial component, and wherein rotation between the bearing and the tibial component is effected by engagement of conforming domes extending respectively from the bearing and the tibial component, the tibial component including radial ribs extending from the dome of the tibial component, and posts for tibial anchoring, The ankle implant of claim 21, wherein the posts are at the ends of the radial ribs.

23-25. (Cancelled)

26. (Currently Amended) A method for implanting an ankle joint prosthesis between a tibia and a talus, the method comprising:

attaching a tibial component to the tibia, the tibial component including only one tibial flange;

attaching a talar component to the talus;

articulating a bearing for ~~limited~~ rotation relative to the tibial component and hinged movement relative to the talar component; the bearing including only one bearing flange; and

limiting relative rotation between the tibial component and the bearing by engaging the tibial and bearing flanges.

27. (Cancelled)

28. (Original) The method of claim 26, wherein hinged movement includes movement between two conforming doubly curved surfaces of the bearing and the talar component.

29. (Original) The method of claim 26, wherein rotation is effected by engagement of conforming domes extending respectively from the bearing and the tibial component.

30-38. (Cancelled)

39. (Currently Amended) The ankle implant of claim 32 40, wherein the ~~first and second domes~~ convex and concave articulating surfaces are selected from the group consisting of sphere, cylinder, cone and portions thereof.

40. (New) A modular ankle implant for implantation between a tibia and a talus, the implant comprising:

a tibial component including an inner pocket defining by a concave articulating surface and first and second sides including opposing curved protrusions extending into the pocket;

a bearing component including a bearing plate and a dome rising from the bearing plate, the dome received in the inner pocket of the tibial component, the dome including a convex articulating surface mating with the concave articulating surface of the inner pocket for relative rotation therebetween and two planar surfaces extending on opposite sides of the curved surface, the planar surfaces interacting with the curved protrusions limiting rotation of the bearing component relative to the tibial component; and

a talar component articulating with the bearing component for relative movement in sagittal and coronal planes.

41. (New) The ankle implant of claim 1, wherein the single tibial flange is only one tibial flange extending from only one side of the tibial component, and the single bearing flange is only one bearing flange extending from only one side of the bearing component.